Comments Regarding 03-104 on PLC.

From: Gary Altig, N7UVL

After seeing the ARRL video of PLC interference monitoring, it appears PLC is a RF noise hazard that cannot be contained.

- 1. There are multiple agencies and services that will be affected as this noise cannot be contained to just Amateur Radio bands. Homeland Security, FEMA, National Guard, Military are just a few agencies that will be affected and need to be brought into this Comment procedure. I'm sure they will have something to say also after conducting their own tests. Although probably less affected, the Coast Guard should be included to test the affect on inshore and nearshore LORAN operations also.
- 2. Part 15 LF and MF operations have a limited antenna length. There is a reason for this and it would appear that the unlimited length of PLC wire creating an enormous radiator is going to be a problem that cannot be resolved.
- 3. TEMPEST Hazard. Most of the public is not aware of how easy it is to monitor microwave transmissions and that much of the public phone and data systems are easily monitored. But there is some minor expense involved with this type of monitoring. With the PLC TEMPEST hazard, this will bring the capability of monitoring in the price and technological range of just about anyone wanting to "hack" the data transmissions without having to utilize a physical connection (wire tap).

Now if the power companies want to utilize the towers and run fiber optics for data transmissions, I don't see a problem with that. The towers are already in place and fiber optics would not interfere with RF communications or with power line operations. Thank You for listening./ga